

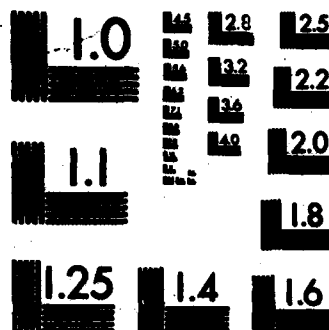
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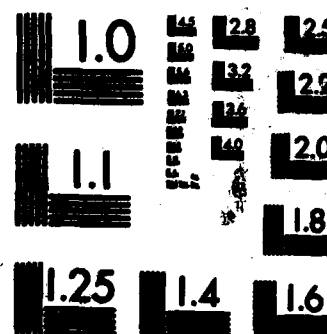
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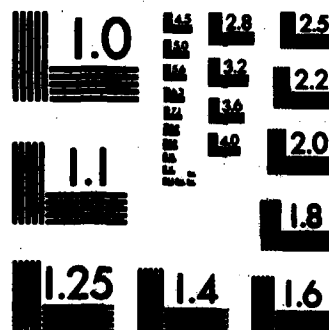
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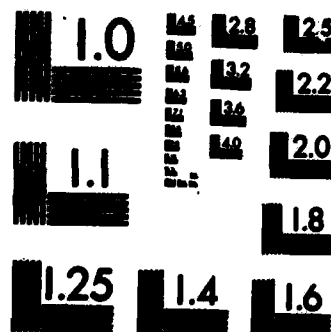
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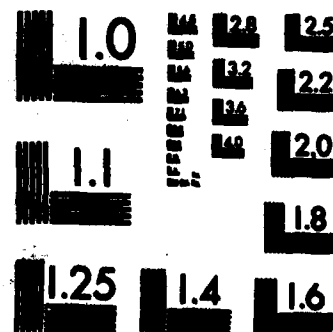
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SECURITY CLASSIFICATION OF THIS PAGE (When Data Entered)

REPORT DOCUMENTATION PAGE		READ INSTRUCTIONS BEFORE COMPLETING FORM
1. REPORT NUMBER ONR-TR#2	2. GOVT ACCESSION NO. AD-A120803	3. RECIPIENT'S CATALOG NUMBER
4. TITLE (and Subtitle) Discipline in organizations: A field study.		5. TYPE OF REPORT & PERIOD COVERED Final Report
7. AUTHOR(s) Richard D. Arvey, Gregory A. Davis, & Sherry McGowen		6. PERFORMING ORG. REPORT NUMBER
9. PERFORMING ORGANIZATION NAME AND ADDRESS Richard D. Arvey, Ph.D. Department of Psychology University of Houston, Houston, Texas 77004		8. CONTRACT OR GRANT NUMBER(s) N00014-80-C-0541
11. CONTROLLING OFFICE NAME AND ADDRESS Organizational Effectiveness Research Programs Office of Naval Research (Code 452) Arlington, VA 22217		10. PROGRAM ELEMENT, PROJECT, TASK AREA & WORK UNIT NUMBERS NR 170-914
14. MONITORING AGENCY NAME & ADDRESS (if different from Controlling Office)		12. REPORT DATE September, 1982
		13. NUMBER OF PAGES
		15. SECURITY CLASS. (of this report) Unclassified
		15a. DECLASSIFICATION/DOWNGRADING SCHEDULE
16. DISTRIBUTION STATEMENT (of this Report) Approved for public release; distribution unlimited.		
17. DISTRIBUTION STATEMENT (of the abstract entered in Block 20, if different from Report)		
18. SUPPLEMENTARY NOTES OCT 23 1982 A		
19. KEY WORDS (Continue on reverse side if necessary and identify by block number) Discipline Punishment Attribution theory		
20. ABSTRACT (Continue on reverse side if necessary and identify by block number) Hourly employees (N=526) working in a refinery were surveyed about their perceptions of their immediate supervisor's disciplinary behavior as well as the kinds of factors supervisors take into account when applying discipline. Other perceptions concerning other supervisors' use of discipline, and evaluation of the disciplinary system as a whole were elicited. Factor analytic and correlational procedures were explored to:		

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S/N 0102-LF-014-6601

Unclassified

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20. Abstract (contd) .

- 1) Determine the kinds of disciplinary factors which are perceived as operating in the organizations,
- 2) Determine the relationships between these disciplinary factors and other employee variables such as satisfaction with supervisor, disciplinary history, grievances and so forth, *And*
- 3) Determine the attributions that supervisor are perceived as forming within the disciplinary process and determine the relationships between these types of attributions and selected employee variables.

Results indicated several reliable and stylistic supervisory disciplinary factors could be identified which showed high relationships with supervisory satisfaction and the evaluation of the organizational disciplinary program but low correlations with more distant and objective criteria of disciplinary history and grievances. Further, results indicated several attributional dimensions that employees perceive their supervisor using when applying discipline. However, these dimensions were not consistent with the kinds of attributional elements identified in previous literature.

A final finding was that both reward- and punishment-oriented supervisor behavior relate independently and incrementally to satisfaction with supervision, but that reward-oriented behavior is relatively more important.

Discipline in organizations: A field study¹

Richard D. Arvey, Gregory A. Davis, and Sherry McGowen

The University of Houston

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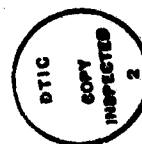
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¹This study was made possible through the Office of Naval Research (Grant N00014-80-C-0451).

Abstract

Hourly employees (N = 526) working in a refinery were surveyed about their perceptions of their immediate supervisor's disciplinary behavior as well as the kinds of factors supervisors take into account when applying discipline. Other perceptions concerning other supervisors' use of discipline, and evaluation of the disciplinary system as a whole were elicited. Factor analytic and correlational procedures were explored to

- 1) Determine the kinds of disciplinary factors which are perceived as operating in the organizations.
- 2) Determine the relationships between these disciplinary factors and other employee variables such as satisfaction with supervisor, disciplinary history, grievances and so forth.
- 3) Determine the attributions that supervisor are perceived as forming within the disciplinary process and determine the relationships between these types of attributions and selected employee variables.

Results indicated several reliable and stylistic supervisory disciplinary factors could be identified which showed high relationships with supervisory satisfaction and the evaluation of the organizational disciplinary program but low correlations with more distant and objective criteria of disciplinary history and grievances. Further, results indicated several attributional dimensions that employees perceive their supervisor using when applying discipline. However, these dimensions were not consistent with the kinds of attributional elements identified in previous literature.

A final finding was that both reward- and punishment-oriented supervisor behavior relate independently and incrementally to satisfaction with supervision, but that reward-oriented behavior is relatively more important.

Traditionally, the topics of discipline and punishment in organizations have held unpleasant connotations. Yet it is clear that organizations frequently use discipline and other aversive control systems in their attempts to modify and change employee behavior and attitudes. Despite its common use, the topic of discipline and/or punishment has received almost no research attention from organizational researchers. Although research in other applied settings has revealed that the use of discipline/punishment is extremely effective in reducing or eliminating undesirable behavior, researchers in organizations have focused almost exclusively on positive reward systems for modifying and changing employee behavior. It is now timely to examine how discipline in organizations impacts employee behavior, morale, and especially the target behaviors which are deemed by the organization to be undesirable. The research reported here is one of the first studies investigating discipline and the role of discipline in its relationship to other organizational variables and employee factors. In this study, we will use the terms punishment and discipline coterminously. Even though "punishment" is likely to have greater unpleasant connotations than "discipline", the two terms are defined similarly. They both involve the presentation of some aversive event or removal of a positive event following an undesirable response.

The present study constitutes a field study which is essentially exploratory in nature. Essentially, we are interested in investigating the ways and manners in which employees perceive discipline, whether supervisors differ in their application of discipline, and the relationships between employee perceptions of discipline and their satisfaction levels, as well as other important organizational variables. Fortunately, there is a growing body of literature which provided guidance for the basic framework of the present study. Arvey & Ivancevich (1980) focused directly on the use of punishment in organizations and provided a number of research propositions. After presenting a historical perspective on the use of and beliefs about

punishment, Arvey & Ivancevich (1980) suggested that punishment may be effective in organizations but that its effectiveness may depend on the influence of several variables. They suggested that the following factors, among others, would be influential:

1. The timing of punishment. Punishment would be more effective if delivered immediately after the occurrence of an undesirable response.
2. The intensity of the punishment. The intensity of the punishment is related to its effectiveness, but conflicting information exists concerning whether high, moderate, or low levels of intensity are more effective.
3. Relationships with punishing agents. Punishment procedures would be more effective where the agent administering the punishment holds a close and friendly relationship with the employee being punished.
4. Consistency of punishment. Punishment of undesired behaviors would be more effective when applied consistently across employees, and applied consistently for the same offense across time.
5. Provision of rationale. Punishment would be more effective when clear reasons are communicated concerning why the punishment occurred.

However, these specifications by Arvey & Ivancevich (1980) were based on purely theoretical grounds and lacked any firm empirical underpinnings. One objective of the present study was to investigate employee perceptions of discipline in their organization and how it is applied. We were interested in providing preliminary answers to the following questions:

1. What are the different kinds of disciplinary factors which come into play in an actual organization? That is, do the variables which

emerge from an empirical analysis correspond to the factors which seem important theoretically with regard to the application of discipline?

2. Do supervisors differ in the manner and ways in which they apply discipline to their employees? That is, do supervisors employ different disciplinary "styles" when taking punitive action toward their subordinates?

3. What are the relationships, if any, between the various disciplinary factors in an organization and such employee variables as perceived fairness of the disciplinary system, employee grievances, and number of disciplinary actions taken, in addition to employee satisfaction with the job and supervisor?

In this study we will also investigate discipline from an attributional perspective. Mitchell, Green, & Wood (1981) have applied an attributional analysis to the frequency and kinds of aversive behaviors leaders exhibit toward the poorly performing subordinate. Essentially, they suggest that leaders make attributions regarding perceived causes for understanding employee behavior and respond according to these attributions. They drew on the work of Kelley (1967) and Weiner et al. (1972) in proposing that leaders will attribute poor performance to a variety of causes. The predominant classification scheme is to attribute behavior to be a function of ability, effort, task difficulty, and luck, which are seen as representing two major dimensions: stability and locus of control. Mitchell, Green, & Wood (1981) and Green & Mitchell (1980) present a discussion of the kinds of attributional elements which might be important. They suggest that, generally speaking, leaders form attributions concerning whether a perceived subordinate's behavior was due to internal or external factors associated with the subordinate. To the extent that the leader attributes the cause of a particular behavior as due to an internal cause,

the leader may respond punitively if the perceived cause is seen as due to lack of effort. Attributions to external causes prompt the leader to focus on changing the situation. In addition, Mitchell, Green, & Wood (1981) indicate that if the leader perceives the cause for a particular subordinate behavior as being under the control of the subordinate, he/she is apt to apply more rewarding and punishing sanctions for the observed behaviors.

Mitchell et al. (1981) also indicate that there are a number of possible factors which directly or indirectly influence leader attributions. They suggest that personal characteristics such as sex and race affect the attribution process. Leaders are likely to attribute female successes more to external causes and attribute their failures more to internal causes than they do for the male counterparts. Also, the consequences or outcomes of the subordinate behavior are likely to influence the attributions made. A behavior which results in some kind of serious consequence (e.g., financial loss, accident, etc.) is more likely to result in a punitive action than behaviors which have less serious consequences.

In a seminal article dealing primarily with judicial systems, Miller & Vidmar (1980) discuss the kinds of factors which appear to moderate or influence punishment responses. Many of these factors correspond to the attributional factors mentioned by Mitchell et al. and others. For example, they indicate that past history of the offender, the social, occupational, and educational status of the offender, individual differences associated with the punitive agent (e.g. authoritarianism, etc.), consequences of the behavior, etc. are all possible moderators of the punishment response. More recently, Podsakoff (1982) has outlined similar determinants of supervisors' use of punishment. While the above authors have furnished a heuristic model concerning the discipline process, the present study will offer some empirical evidence concerning the attributional processes which appear to influence the decision to apply discipline to employees.

Two questions concerning leader attributions will be addressed in the present study. First, what kinds of attributional factors are leaders perceived by subordinates as utilizing? The present study is an empirical investigation of the kinds of factors supervisors take into account when applying discipline as perceived by their subordinates. We will also determine whether the dimensions derived from an empirical analysis correspond to some of the factors and dimensions mentioned above. Second, does the use of particular attributional dimensions by leaders in deciding to apply discipline as perceived by their subordinates result in greater or less subordinate satisfaction with that leader? For example, do leaders who appear to take into account a variety of situational and external factors in applying discipline have more satisfied subordinates than do leaders who appear to attribute rule infractions to internal causes? Green & Liden (1979) presented a study which suggested that subordinate satisfaction is highest when supervisors form external attributions. The present study investigates subordinate satisfaction with their supervisors as a function of the kinds of attributions they perceive their supervisors as making.

To summarize, the present study looked at discipline along two broad domains of investigation:

- 1) Isolating the important dimensions of discipline and the relationships between these variables and other employee variables.
- 2) Determining the attributions that supervisors are perceived as forming within the discipline process and determining the relationships between these types of attributions and selected employee variables.

Method

The study was conducted using hourly workers employed at a large southwestern chemical plant and oil refinery. At first glance, the official rules and

regulations developed as part of the employee contract seemed straightforward concerning what kinds of discipline should occur for which rule infractions. Yet there was considerable variability in the disciplinary actions taken throughout the plant due to ambiguity as to whether an infraction occurred, how it was interpreted, and the formality or informality of the actions taken.

The plant was heavily unionized, and cooperation and permission to conduct the study was sought and obtained from both management and union officials. While both management and union officials exhibited considerable interest in the study and communicated with employees to improve their cooperation, it is important to note that the topic of discipline is a sensitive one to hourly employees and these individuals were naturally suspicious throughout the study. Throughout the study we made continual efforts to assuage worker fears of reprisal, abuse of research results, etc. The study was conducted in two phases.

Phase I Initial Interviews

Phase I essentially involved learning as much as possible about the disciplinary process and how it worked in this major chemical and oil refinery. One hundred employees from the hourly employee plant population ($N=1978$) were chosen to be interviewed. These employees were sampled randomly from groups classified on the basis of sex, race, tenure, job position (operators or maintenance work), and location (chemical plant or refinery). These employees were contacted and asked to participate in the study. Of the employees contacted, fifty-seven were eventually interviewed by one of six different members of the research team. Employees were asked to produce examples or critical incidents of occasions when they had been disciplined, to indicate how they felt about the discipline process in general, to indicate things they felt were fair or unfair about the discipline program, to indicate how their supervisor handled disciplinary situations, etc. The information gleaned from these interviews was used to generate preliminary

inferences of how the disciplinary process operated and to identify the variables which influence this process. For details concerning these inferences see Arvey (1981). However, the major objective of this first phase was to obtain information to be used to construct the questionnaire instrument used in the second phase of research.

Phase II: Field Study

Armed with the information gained from this interviewing process and the theoretical work contributed by Arvey & Ivancevich (1980), Mitchell, Green, & Wood (1981), and others, a questionnaire was prepared and distributed to all hourly employees. The following sections detail the various components of the questionnaire used in the present study:

1. Basic Biographical Data. Items were prepared which ascertained age, sex, tenure, education, etc.
2. Supervisors' Application of Discipline. This section included 38 items eliciting employees' perceptions of their immediate boss and the manner in which he/she disciplined employees. (e.g., "My boss administers rules in a childish or petty fashion", "My boss is consistent from situation to situation in the way he disciplines people", "My boss disciplines people for breaking rules that he himself has broken", etc.). Responses to these items were made on a 5-point Likert format scale (1=disagree, 5=agree).
3. Supervisors' Attributional Factors. Seventeen items were prepared which ascertained how often the immediate boss is perceived as taking into consideration various elements when disciplining a person (e.g., the actual consequences of the rule infraction, the person's past job performance, the person's race and/or sex, the person's skill, etc.). Note that many of these factors parallel those described in the theoretical literature reviewed earlier. Responses were made on a 5-point Likert scale (1=never, 5=always).

4. Supervisors' Types of Punishers. Fifteen items were written to determine the relative frequency of punitive actions. These items reflected both the formal and informal punitive actions that supervisors might take (e.g., "Yell at you or chew you out", "Write you up", "Threaten or warn you", etc.). Responses were on a 5-point Likert scale (1=never, 5=always).

5. House and Dressler's Support and Instrumental Leader Behavior Scales. Instrumental and supportive leader behavior were measured using a modified version of the House and Dressler (1974) scales. (Some of the items were modified to reflect individual-directed leader behavior rather than group-directed leader behavior). These scales are intended to measure individual perceptions of leader behavior that is "directed at clarifying (employees') role perceptions (instrumental leadership) and behavior that is friendly and approachable and considerate of the needs of the subordinates (supportive leadership)" (Greene and Schriesheim, 1980). Internal consistency reliabilities for the instrumental scale ranged from .72 to .78, and from .69 to .74 for the supportive scale (House and Dressler, 1974).

6. Other Supervisors. A number of items (13) were written which elicited perceptions of other supervisors and the company's administration of discipline (e.g. "Some of the rules are petty and childish", "Bosses often use discipline to make themselves look good", etc.). Responses were made on a 5-point agree-disagree Likert scale (1=disagree, 5=agree).

7. Perception of the disciplinary system in general. Nine semantic differential items were prepared to reflect a number of factors which could reflect aspects of a disciplinary system (e.g., fair--unfair, consistent in enforcing rules--inconsistent, satisfactory--unsatisfactory, good--bad, etc.).

8. Satisfaction Measures. Two measures of satisfaction were used, both taken from the Job Diagnostic Survey (Hackman and Oldham, 1974). The general satisfaction subscale consists of three items answered on a 7-point Likert scale. The internal consistency reliability estimate reported for this scale was .76 (Hackman and Oldham, 1974). Satisfaction with supervisor is also measured with three items in a Likert-like format. The internal consistency reliability estimate reported for this scale was .79 (Hackman and Oldham, 1974).

A questionnaire was also distributed to supervisors but these data will not be discussed in the present paper. While the questionnaire was being constructed, personnel records at the plant were reviewed to determine for each currently employed hourly employee the number and kinds of disciplinary actions taken against that employee over his/her work career with the company, and the number and outcomes of the grievance actions taken by the employee during the course of his/her career. Thus, the frequency of formal rule infractions was collected from company files for all hourly employees. Because these data were found to be positively skewed, a logarithmic transformation of the data as suggested by Kirk (1968) was used to achieve normality of the distribution. The total number of grievances filed by each hourly worker was transformed in the same manner as the discipline data.

Sample

The questionnaire was distributed by mail to all hourly employees (N=1978). The study was described as being for research purposes only and indicated that all responses would be kept confidential; the questionnaire was accompanied by a letter signed by both management and union officials urging participation in the

study. The questionnaire was stamped with a code and employees informed that it was necessary to identify them through the code in order to coordinate these responses with other information. Every attempt was made to be open and completely honest with employees at every step. Two follow-up postcards were sent and non-respondents were encouraged to call for an additional questionnaire if they had lost or misplaced theirs. After two months, there were no further returns so data key-punching and analysis procedures were started.

The number of usable questionnaires returned was 526 which represents a response rate of 25.8%. This response rate was disappointing. Historically, however, this particular population apparently has not been very responsive to surveys of this sort. For example, responses to a union questionnaire administered a year or two earlier was less than 40%. An important question, therefore, concerned the possible differences between the respondent and non-respondent populations in the plant and the external validity of any inferences drawn.

Table 1 presents summary figures concerning characteristics of the respondent sample, the non-respondents, and the total population. Tests were computed (e.g., t -tests and chi-square tests) to determine whether significant differences existed between the respondent and non-respondent groups. There were no significant differences between these groups on the variables of age, years of education, chemical or refinery location, operations or maintenance representation, or sex. However, there were significant differences between the two groups in terms of tenure ($\chi^2 = 17.33$, $df=4$, $p \leq .01$) and race ($\chi^2 = 4.36$, $df=3$, $p \leq .01$). Fewer blacks responded and the respondents were individuals with slightly greater tenure with the company. When, however, the characteristics of the respondent group on these two variables are compared to the total population, the differences in percentage points are relatively small.

 Insert Table 1 about here

The data in Table I indicate that while the respondent sample had slightly fewer disciplinary actions taken against them than the non-respondent group, the t -test computed after a log transformation of these data was non-significant ($t(1040)=1.51, p \leq .13$). No differences were observed between the two groups on the total number of grievances.

Overall then, there are some differences between the respondent and non-respondent groups which suggest that the respondents might be subjects with longer tenure, and represent fewer minorities than the non-respondent group. However, compared to the total population, these differences are not all that great. In addition, the significant differences which emerged are to be expected because of the relatively large sample sizes.

Procedures

The analyses proceeded along several steps. First, factor analyses of the various components of the questionnaire were performed in order to determine the major dimensionality of the items. A principal factor solution with varimax rotation was used; those factors with initial eigen values greater than 1.0 were rotated. For the factors which emerged from these analyses, factor scores were computed for each respondent (using unit weights) and coefficient alphas obtained. It was decided to obtain intraclass correlation coefficients for factors which applied directly to supervisors. Supervisors with more than three employees who had completed the questionnaire were identified and typical ANOVA procedures were utilized to determine the between-supervisor and within-supervisor variability. An F -test was computed to determine whether there was a significantly larger amount of between-supervisor variability than within-supervisor variability. Subsequently, an intraclass correlation coefficient was computed as suggested by Winer (1971) and James (1982). The rationale used was that for these factors to have much meaning, there should be greater variability between supervisors than within supervisors. That is, shared agreement among employees concerning their immedi-

ate supervisors on these dimensions was used as one index of the construct validity of the factors.

Once the various factors were identified, intercorrelations were computed to determine the relationships between the factors themselves and other dependent variables such as satisfaction and grievance rates. These analyses will be further delineated in the results section.

Results and Discussion

When the items having to do with subordinates' perceptions of their immediate supervisors' application of discipline were subjected to the factor analyses procedures, three factors emerged, one of which was not dealt with further because of a low alpha level. The other two factors are shown in Table 2.

Insert Table 2 about here

The first factor (Factor A), labeled "Disciplinary Style", has to do with the general manner in which the employees immediate supervisors apply discipline. A positive score on this factor indicates that, in general, the supervisor administers discipline in a relatively inappropriate manner--in a childish or petty fashion, being typically angry, etc.

The second factor (Factor B) has to do with "Consistency" in applying discipline. The alpha levels indicate a high reliability for these two factors. In addition, the F-values obtained when testing the between vs within supervisor variability on these two factors were significant, and the intraclass correlations were .32 and .26.respectively. These values, while not high, do indicate that supervisors differ reliably in the manner in which they respond to their respective employees along these kinds of disciplinary factors. It appears as if these two factors reflect reliable stylistic ways in which different supervisors apply disci-

pline. Interestingly, the factor analysis results did not reflect the numerous dimensions mentioned in the introduction, and thus suggest that while many theoretical dimensions of supervisory discipline exist, the empirical data reflect a more limited number. At least, employees did not perceive the multiple distinctions suggested by the literature. There is a limiting element to consider here, however. The various dimensions suggested in the literature were not represented by multiple questionnaire items. That is, each dimension typically was represented by only one item, making it difficult, if not impossible, for any factor analytic procedure to extract the specific dimension due to a limited item base. However, the dimensions which do emerge make good sense. Some supervisors are quite "mature" in their application of discipline, whereas others use discipline in rather arbitrary and inappropriate ways. Similarly, some supervisors are consistent within and between employees in the manner in which they apply discipline and some supervisors do not exhibit this consistency.

Table 3 presents the factor analysis results for the items having to do with subordinates' perceptions of the relative frequency of informal and formal disciplinary actions taken by their supervisor. Two factors emerged; Factor A seemed to reflect the formal disciplinary procedures ("Formal Punishers") administered by supervisors with the exception of one item ("Verbally abuse you"). Factor B seemed to largely reflect the informal punishers at the disposal of the supervisor ("Informal Punishers").

 Insert Table 3 about here

These data suggest that there are two relatively independent systems of punishers perceived by employees to be operating in the organization. However, the F-values computed to determine whether there was significantly greater

between-supervisor variability compared to within-supervisor variability did not reach significance for the "Formal Punishers" factor ($F=1.03$, N.S.), nor was the intraclass correlation coefficient particularly high (.04). In contrast, the F -value for the "Informal Punishers" factor was significant ($F=2.00$, $p .05$) along with a higher intraclass correlation coefficient (.21) indicating reliable stylistic differences among supervisors in their use of the informal punishment system.

When the items reflecting perceived attributional elements used by supervisors were factored, four factors resulted. One factor failed to demonstrate a sufficiently high alpha value and, therefore, was dropped. The remaining three factors are presented in Table 4.

 Insert Table 4 about here

The first factor (Factor A) reflects supervisors' consideration of the consequences of the rule infraction, in addition to taking into consideration such employee behaviors as past performance, skill, disciplinary history, etc. In relationship to the other factors developed, this factor seems to reflect the notion that supervisors are sometimes perceived as using relatively objective circumstances in making the decision to administer discipline. The second factor (Factor B) seems to reflect more subjective factors such as perceived employee attitude toward the company and boss, in addition to a component representing pressure on the boss. The third factor, Minority Characteristics, is quite clear and represents the degree to which employees perceive their supervisor as taking into consideration minority variables when applying disciplinary actions. Taken as a whole, the kinds of factors developed here fail to correspond to the theoretical classification mentioned by previous authors.

When the items drawn from the House & Dressler scales were factor analyzed, two factors emerged which clearly confirm the scales' factorial compo-

sition. The Support scale accounted for 75.2% of the variance (eigenvalue = 12.47) and the resulting alpha was .92. In addition, the intraclass correlation coefficient for this scale was .20. The factor representing Structure accounted for 13.5% of the variance (eigenvalue = 1.47) and the coefficient alpha was computed to be .75. The intraclass correlation computed for this scale was .11 but the F -value was, nevertheless, significant ($F=1.47, p .05$).

The factor analysis of the 13 Likert-type items eliciting perceptions of other supervisors' administration of discipline resulted in three factors, two of which did not achieve acceptable alpha levels and were thus discarded from further analyses. The remaining factor, called "Misuse of discipline" reflected a general abuse of the "spirit" and "law" of applying discipline. Individuals who score high on this factor describe other supervisors as using discipline to "weed out people", use favoritism, etc. This factor and the items which load on it are shown in Table 5.

Insert Table 5 about here

The factor analyses of the semantic-differential items of perceptions concerning the disciplinary system in general reveals two factors as shown in Table 6.

Insert Table 6 about here

The first factor, which accounted for 68.4% of the common variance reflected a general evaluative dimension. We labeled this factor "Evaluation". The second factor, accounting for 31.6% of the common variance, seemed to reflect the manner of application of discipline--whether discipline was too lax, too easy, and too flexible vs too strict and too rigid. We designated this as the "Application"

factor. The alpha values for both these factors were acceptable (.88 and .75)

The scale built from items drawn from the Job Diagnostic Survey to measure general overall job satisfaction exhibited a coefficient alpha level of .74 which was satisfactory. Similarly, the scale measuring satisfaction with the immediate supervisor demonstrated a coefficient alpha of .86.

In review, several factors or dimensions of discipline were isolated using factor analytic procedures. Addressing some of the questions raised in the introduction to this paper, we have identified factors pertaining to the administration of discipline by supervisors as perceived by their employees. Some of these dimensions had to do with employees' immediate supervisors and other factors had to do with more broad systemic factors. Further, other scales were developed which reflected satisfaction with the job and with supervision. It is helpful to order these variables with regard to what we would call independent variables, intermediate criteria, and distant criteria. Figure 1 presents our view of the "proximity" of these variables to one another.

 Insert Figure 1 about here

First, employees have perceptions about the disciplinary behaviors of their immediate supervisors. These perceptions are represented by the factors dealing with the immediate boss's manner of applying discipline (2 factors), the kinds of punitive actions taken by the immediate boss (2 factors), and the immediate boss's attributions (3 factors). Also, employees view their immediate supervisors not only from the perspective of discipline, but from the support and structure given to them in their jobs by their immediate supervisor. These dimensions are represented by the House & Dressler scales of support and structure. Second, employees have perceptions about not only their own supervisor but other supervisors as well.

These perceptions are represented by the Factor "Other Supervisors Misuse of Discipline".

We view these employee perceptions of the immediate and other supervisors as being related to several intermediate criteria. Specifically, we will use the employees' perceptions of the general disciplinary system (2 factors) as well as overall job satisfaction and satisfaction with supervisor as one set of intermediate criteria.

Finally, at a more distant level, are the external and objective measures of disciplinary history, and grievances. We are interested in the relationships of all these variables but ordering them in this kind of fashion helps us in directing our analyses.

The analysis proceeded along the following lines. First, subgroup differences were examined to determine whether demographic (i.e., age, race, sex, etc.) differences occurred on the various immediate, intermediate, and distant criteria. Table 7 presents the results of these subgroup analyses.

 Insert Table 7 about here

Using a .01 level as a criterion alpha level (because of the large number of statistical tests conducted), few subgroup differences were observed. Significant differences were observed between operators and maintenance employees on the first attribution factor perceived consequences. Operators described their supervisor as being more apt to take into account objective features of the person and situation ($\bar{M}=3.56$) when applying punishment than did maintenance employees ($\bar{M}=3.32$). Also, operators described their supervisors as providing significantly less structure ($\bar{M}=3.25$) than the supervisors described by the maintenance employees ($\bar{M}=3.44$). In general, however, few differences were observed across the various subgroupings on the immediate, intermediate, and distant criteria.

Next, using Figure 1 and the general objectives indicated in the introduction as a guide, correlational and multiple correlational analyses were performed to examine the relationships between the perceptions of the behavior of the immediate supervisor and perceptions of the behavior of other supervisors with the intermediate, and distant criteria. Table 8 presents those results.

 Insert Table 8 about here

Examination of these results indicates that, in general, the distant criteria of individual disciplinary history and grievances variables are not highly correlated with the perceptual variables. The disciplinary history variable showed only one significant relationship (with the supervisor "Consistency" factor) and this was quite low (.07). The number-of-grievances variable correlated significantly with four variables but the Multiple Regression Coefficient failed to reach significance.

The satisfaction-with-supervisor variable correlated highly with a number of the factors. The Multiple Correlation Coefficient was .83 and was significant at the .01 level. The variables which correlated highest with supervisor satisfaction were the House & Dressler Support Scale (.80), followed by the two immediate supervisor factors of disciplinary style and consistency (-.69 and .71). Thus, it appears as if both the perceived reward style and the perceived punitive behaviors of the supervisor are important in predicting employees' satisfaction with supervisor. Some comment should be made concerning the relationship observed between satisfaction with supervisor and the minority attribution factor. This correlation (.39) indicates that employees are more satisfied with their supervisor when they perceive their supervisors as taking into account minority characteristics in the application of discipline. This is a somewhat surprising finding and possibly reflects an employee endorsement of bias among supervisors.

Overall job satisfaction was not correlated with any of the variables examined--punitive or reward oriented. This finding is somewhat surprising. This low relationship is perhaps due to a limited role of supervisor reward and punitive behaviors in influencing job satisfaction in this broader context, and to the fact that other variables in the job context are more important correlates of this variable.

However, these data clearly indicate that perceived punitive behavior on the part of supervisors is associated with satisfaction with supervisors. To the extent that supervisors are abusive and childish in their application of discipline, inconsistent in their application of discipline, apt to use informal punishers, and not supportive of their employees, employees express dissatisfaction with them.

Perceptions of the disciplinary system in general, as reflected by the "Evaluation" factor, were significantly correlated with all of the variables examined. However, the Multiple Correlation Coefficient of .47, although significant, still indicates that only 22% of the variance is explainable and 88% of the variance is unpredicted by these variables. The perceptions of the discipline system "applications" factor was also not very predictable. A question which may be asked, then, is what variables would ^{contribute} _A to the evaluation of the disciplinary system, besides those measured?

Subgroup analyses were also conducted. Correlations between the various immediate, intermediate, and distant criteria were computed separately for age, sex, education and operation/maintenance subgroups. Tests of differential relationships were computed between the various subgroups. Generally speaking, very few of these comparisons reached significance and we will not discuss these here. The relationships observed in Table 8 were typically consistent across subgroups.

The relationships between the intermediate criteria and the distant criteria are shown in Table 9. While a number of intermediate criteria

Insert Table 9 about here

show significant correlations with the distant criteria, the relationships were generally low and none exceeded .15. Multiple correlations are also shown. It is somewhat disappointing that the disciplinary history variable failed to exhibit higher correlations with the intermediate criteria. It appears as if grievance rate was more predictable.

It was decided to also review some specific items based on their presumed theoretical relationships to the intermediate and distant criteria. Table 10 shows the simple-order correlations between selected items based on the propositions advanced by Arvey & Ivancevich (1980) reviewed earlier and the various criteria.

Insert Table 10 about here

These data again reflect the pattern shown previously; the items are generally highly correlated with the intermediate criteria but demonstrate a pattern of low relationships with the distant criteria.

In discussing these results it is useful to refer back to the original objectives of our study. Our first objective was to determine what kinds of supervisory disciplinary factors were operational and to determine whether they corresponded to those identified theoretically. Our results indicate that the perceived supervisory disciplinary factors were more limited than we anticipated. Two rather broad factors emerged, one, which we called "disciplinary style" reflected abuse of discipline and punishment, and another called "consistency" reflected the degree of consistency with which a supervisor applied discipline across and within employees. As indicated by the intraclass correlation coefficients, supervisors could be reliably

distinguished in their application of discipline along these two factors. Thus, relatively independent stylistic patterns of discipline were identified on which supervisors differed. In addition, factors were identified concerning the types and kinds of punishers supervisors delivered—informal and formal. Results indicated that supervisors differed in the number of informal punishers delivered, thus reflecting another stylistic factor.

Another objective was to determine the kinds of attributional elements or dimensions that employees perceive their supervisors using when applying discipline. Again, a relatively limited number of dimensions emerged. We felt that one factor reflected more objective characteristics of the person and situation, a second factor reflected more subjective attributional components, and a third reflected minority characteristics. The relatively distinct classification schema suggested by previous authors did not clearly emerge. While the attempt to classify attributional elements as being fixed or unstable, external or internal may have heuristic value, the data in the present study reflect a different and perhaps more simplistic structure.

Another objective of the present study was to examine the relationships between the various disciplinary factors and other organizationally relevant factors. Our data indicate that supervisory disciplinary behaviors as reflected in the factors are highly correlated with supervisory satisfaction and evaluation of the organizational disciplinary program, but demonstrated relatively low correlations with overall job satisfaction and with the more distant criteria of disciplinary history and grievances. There are several possible factors which may account for the low correlations with the distant criteria. First, both the disciplinary history and grievance data represent relatively rare or infrequent events. Thus, correlational results may be low due to restricted ranges on these variables. In addition, an actual disciplinary action may represent only a subset of other more informal

punitive behaviors a supervisor may take. Perceptually, employees may view their supervisors as relatively harsh, inconsistent, abusive, etc., but still seldom receive any actual disciplinary action. Moreover, employees form these perceptions based on how a supervisor behaves toward other employees. Thus, the perceptual set an employee may have of his/her supervisor may be based on how a supervisor disciplines other employees. It is possible that an employee may view his/her immediate supervisor as an incredibly poor disciplinarian but never have received any formal punishment himself/herself. Thus, the correlations between those variables would be weakened.

An element of the correlational findings which deserves further attention is the influence of punitive behaviors relative to reward behaviors on employee attitudes and behavior. Sims (1980) argued that studies which contrast positive and negative reward behaviors have shown reward behavior to have a stronger influence. Recently, Kopelman and Schneller (1981) reported the results of a study indicating that a combination of punitive and reward incentive systems had a desirable impact in reducing the employee absenteeism and overtime work. Our results suggest that both factors were highly correlated with supervisory satisfaction. To investigate this matter more directly, the House and Dressler Support and Structure scales were used as indicators of positive- or reward-oriented behavior, while the various other factors (disciplinary style, consistency, attributions A, B, C, formal, informal, other supervisors) were used as indicators of punitive-oriented behavior. Subsequently, the reward oriented variables were entered into a multiple regression equation and the multiple correlation coefficient computed. Then the punitive-oriented variables were entered into the equation as a set and the change in R^2 was tested for significance. The order of the variables was then reversed (first punitive and then reward--oriented variables entered) and the change in R^2 tested. This was done using satisfaction with supervisor as the

dependent variable, since this variable was the most theoretically relevant dependent variable. Table II presents these results.

 Insert Table II about here

These data indicate that while both reward-oriented and punishment-oriented supervisor variables contributed independently and incrementally to supervision satisfaction, the reward-oriented variables demonstrated a slightly greater incremental influence (.086 vs .041 change in R^2). Thus, these data along with the relatively higher single-order correlation demonstrated by the reward-oriented variables suggest that they are slightly more influential with regard to supervision satisfaction. However, the punitive variables contribute independently to this dependent variable and should not be overlooked.

The contributions of the study are clear. It represents the first empirical effort to study discipline and supervisory disciplinary styles. We can reasonably infer that stylistic differences exist among supervisors in manner in which they apply discipline and that these differences are related to the level of their employees' satisfaction with them as supervisors. Moreover, we know more about the kinds of attributions that supervisors are perceived to make in their application of discipline. We also are more confident that both reward and punishment-oriented supervisory behaviors are related to employee attitudes. Focusing simply on reward-oriented and support behavior^{would}_A be insufficient to influence employee supervisory satisfaction.

There are several limiting factors to consider when reviewing the results of the present study. The investigation was a questionnaire field study and must be viewed in light of all the limitations associated with this methodology. Since the data are essentially perceptual in nature, we don't know if the responses represent "reality" or are simply in the minds of the beholders. It is possible that the factor

structure which emerged represents conceptual schema or constructs of the employees, thus further investigation is needed to establish these behavioral styles via an independent methodology.

Sample representativeness is an additional consideration. We cannot be entirely sure that the results obtained generalize to the total plant population, let alone to different locations and organizations. The external validity of the present results remains to be established.

Future research should be conducted to further pinpoint the separate dimensions of discipline and the way in which these variables relate to employee behavior and satisfaction. Also, more work needs to be done investigating the manner in which supervisors combine their reward-and punishment-oriented styles and to determine whether any investive style may be more influential than others.

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Independent Variables → Intermediate Criteria → Distant Criteria

Perceptions of Immediate Supervisor	Perceptions of other bosses	Perception of disciplinary system in general	Satisfaction Variables	Objective Indices
1. Immediate Supervisor (A,B)	1. Other supervisors (A)	1. General System (A,B)	1. Overall job satisfaction	1. Disciplinary history
2. Immediate Supervisors punishers (A,B)			2. Satisfaction with supervision	2. Grievances data
3. Immediate Supervisors attributions (A,B,C)				
4. Support and structure				

Figure 1

Factors identified and their proposed order in relation to independent, intermediate, and distant criteria.

Table 1

Sample Representativeness

	Non-respondents N=1452	Respondents N=526	Population N=1978
<u>Age</u>	$\bar{X}=36.78$ S.D.=11.47	$\bar{X}=37.63$ S.D.=11.59	$\bar{X}=37.00$ S.D.=11.50
<u>Years of Education</u>	$\bar{X}=12.99$ S.D.=1.55	$\bar{X}=12.87$ S.D.=1.56	$\bar{X}=12.92$ S.D.=1.55
<u>Plant Location</u>			
Chemical	49.3%	49.0%	49.2%
Refinery	50.7%	51.0%	50.8%
<u>Type of Jobs</u>			
Operator	61.7%	59.2%	61.0%
Maintenance	38.3%	40.8%	39.0%
<u>Sex</u>			
Male	93.0%	93.0%	93.0%
Female	7.0%	7.0%	7.0%
<u>Race*</u>			
Black	18.9%	11.8%	17.0%
White	71.0%	79.9%	73.0%
Hispanic	10.1%	6.7%	9.2%
<u>Tenure*</u>			
Less than 6 months	2.3%	1.5%	2.1%
6 months to 1 year	1.7%	3.3%	2.1%
1 year to 5 years	42.4%	33.5%	40.0%
5 to 10 years	23.3%	27.6%	24.5%
More than 10 years	30.3%	34.1%	31.3%

*p < .05

Table 1 (continued)

	Non-respondents N=1452	Respondents N=526	Population N=1978
<u>Total Disciplinary Actions</u>			
0	78.0%	84.4%	79.8%
1	12.6%	8.9%	11.7%
More than 1	9.3%	6.4%	8.6%
<u>Total Grievances</u>			
0	90.5%	87.5%	89.7%
1	6.5%	8.2%	7.0%
More than 1	3.0%	4.4%	3.3%

Table 2

**Factor Analysis Results of Perception of Immediate Boss and the Manner
in Which He/She Disciplines Employees**

Immediate Supervisor	Factor A: Disciplinary Style	Eigenvalue percentage of variance	Alpha
<u>Items</u>	<u>Loading</u>		
My boss administers rules in a childish or petty fashion	.68	9.3	.90
My boss uses the disciplinary system to weed out people	.48	84.0%	
My boss disciplines people without giving an explanation or a clear reason	.67		
My boss disciplines people too harshly	.51		
My boss lets second infractions pass without taking action and then suddenly disciplines an employee for the same infraction that he has let pass before	.50		
My boss often seems to be undecided or unclear about what disciplining action to take when a rule is broken	.52		
My boss uses discipline to make an example out of certain employees	.67		
My boss uses disciplinary actions to make himself look good	.68		

Table 2 (continued)

**Factor Analysis Results of Perception of Immediate Boss and the Manner
in Which He/She Disciplines Employees**

<u>Items</u>	<u>Loading</u>		
My boss disciplines people for breaking rules that he himself has broken	.62		
My boss is typically angry or mad when he imposes discipline	.70		
My boss reprimands people in public	.54		
Immediate Supervisor Factor B: Consistency			
<u>Items</u>	<u>Loading</u>	<u>Eigenvalue percentage of variance</u>	<u>Alpha</u>
My boss praises good performance just as often as he disciplines for poor performance or rule infractions	.49	1.23	.88
My boss is fair in his use of discipline	.52	11.0%	
My boss disciplines people immediately after the rule infraction occurs	.42		
My boss is consistent from situations to situations in the way he disciplines	.75		
My boss is consistent from person to person in the way he disciplines people	.74		

Table 3

**Factor Analysis Results of Items Reflecting Relative Frequency
of Formal and Informal Punishers Supervisors Apply**

<u>Items</u>	<u>Factor A: Formal Punishers</u>	<u>Eigenvalue percentage of variance</u>	<u>Alpha</u>
	<u>Loading</u>		
Gives you days off without pay	.70		
Write you up	.67	1.03	.80
Attempt to dismiss you or fire you	.58	14.7%	
Verbally abuse you	.78		
 <u>Immediate Supervisors Punishers</u> <u>Factor B: Informal Punishers</u>			
Yell at you or chew you out	.66	6.03	.88
Bird dog you	.66	85.3%	
Ignore you or withdraw his friendship	.64		
Verbally abuse you (ridicule you or make sarcastic comments)	.65 .64		
Give you bad work assignments	.65		
Threaten or warn you	.65		
Tighten up on rule enforcement	.55		
Criticize you or find fault with your work	.70		
Talk about you behind your back	.70		

Table 4

Perceptions of Immediate Supervisors Attributes or Elements
He Takes Into Account in Applying Discipline

Immediate Supervisor Attributions		Factor A: Consequences of Act and Employee Behavior	
Items	Loading	Eigenvalue/ percentage of variance	Alpha
The actual consequences to the complex of the rule infractions	.75	3.9	.77
The possible consequences to the complex of the rule infractions	.76	49.0%	
The person's past job performance	.68		
The person's past disciplinary history	.47		
The person's skill or ability to do the job	.46		
Immediate Supervisor Attributions		Factor B: Employee Attitudes and Pressure on the Boss	
The boss' relationship with the person	.41	2.8	.78
Whether the boss considers the person to be a trouble-maker or not	.48	35.4%	
Whether or not other people are present when the rule infractions occurs	.44		
The amount of pressure on the boss to get a job done	.64		
The importance to the supervisor of the job or task on which the employee is working	.59		
The person's attitude toward the company	.61		
How well the boss thinks the person fits in with or gets along with others on the job	.55		
Immediate Supervisor Attributions		Factor C: Minority Characteristics	
Whether the employee is Black, White, Hispanic, etc	.82	.6	.84
Whether the employee is male or female	.78	8.4%	

Table 5

Other Supervisors	<u>Factor A: Misuse of Discipline</u>	<u>Items</u>	<u>Loading</u>	<u>Eigenvalue percentage of variance</u>	<u>Alpha</u>
		Bosses often use discipline to make themselves look good	.45	3.1 76.2%	.70
		People who are doing very important jobs will receive more favorable disciplinary treatment than individuals doing less important jobs.	.56		
		Bosses use the discipline system to "weed out" people	.57		
		People who get along well with their boss receive more favorable disciplinary treatment than people who don't get along well with their boss.	.51		

Table 6

Factor Analysis Results of Semantic-Differential Items Concerning
Perceptives of Disciplinary System in General

General Systems Factor A: Evaluation			Eigenvalue/ percentage of variance	Alpha
<u>Items</u>	<u>Loading</u>			
Unfair-fair	.80		3.7	.88
Inconsistent-Consistent in enforcing rules	.54		64.4%	
Unsatisfactory-Satisfactory	.87			
Inadequate-Adequate	.76			
Unreasonable-Reasonable	.82			
Bad-Good	.78			
General Systems Factor B: Application ^a			Eigenvalue/ percentage of variance	Alpha
<u>Items</u>	<u>Loading</u>			
Rigid-Flexible	.65		1.7	.75
Lax-Strict	.85		31.6%	
Too easy-Too harsh	.68			

^a This factor was scored such that larger values signify the inflexible, strict, too harsh end of the continuum.

Table 7

Subgroup Differences in Immediate, Intermediate, and Distant Criteria

	Race ^a		Sex ^b		Age ^c		Operations/Maintenance ^d		Chemical/Refinery ^d	
	F	P	t	P	F	P	t	P	t	P
Disciplinary Style	.39	.75	.97	.33	2.36	.07	1.16	.24	.80	.42
Consistency	.82	.48	.92	.36	2.17	.09	.83	.40	-1.08	.27
Formal Punishers	2.58	.05	1.69	.09	.47	.70	.50	.61	1.02	.30
Informal Punishers	.32	.80	.13	.89	2.11	.10	-2.52	.02	1.81	.07
Attributions: Consequences	.50	.68	1.91	.06	2.49	.06	2.97*	.003	.14	.88
Attributions: Attitudes	.24	.86	-1.02	.31	2.31	.07	-2.17	.03	1.55	.12
Attributions: Minority	1.77	.15	-.58	.56	1.76	.15	-.84	.40	.50	.61
Misuse of Discipline	.69	.55	-2.00	.05	2.90	.03	-.92	.35	-1.13	.261
House and Dressler: Support	1.62	.18	-.54	.59	1.63	.18	1.43	.15	-.26	.79
House and Dressler: Structure	2.90	.03	-.58	.56	.64	.58	2.66*	.008	.57	.56

^aRace was divided into Black, White, Hispanic and Other subgroups and ANOVA's computed.

^bMale/Female differences were explored using t-tests.

^cThe age variable was broken down into 4 groups (≤ 30 , 31-40, 41-50, > 50), and ANOVA's computed.

^dDifferences were explored using t-tests.

* $p \leq .01$

Table 7 (continued)

	Race ^a		Sex ^b		Age ^c		Operations/Maintenance ^d		Chemical/Refinery ^d	
	F	P	t	P	F	P	t	P	t	P
General Evaluation	1.07	.36	1.18	.14	1.88	.13	2.6	.02	1.19	.23
System Application	1.07	.10	-.72	.47	3.18	.02	.33	.74	-.06	.95
Job Satisfaction	1.25	.29	-2.29	.02	1.86	.13	-1.57	.11	-1.86	.06
Satisfaction with Supervisor	.59	.62	.75	.45	.448	.71	1.98	.05	.76	.44
Disciplinary History	.49	.68	4.42	.03	.65	.58	.00	.98	.75	.38
Grievances	1.04	.37	.52	.46	3.43	.02	.38	.53	4.34	.03

^aRace was divided into Black, White, Hispanic, and Other subgroups, and ANOVA's computed.

^bMale/Female differences were explored using t-tests.

^cThe age variable was broken down into 4 groups (<30, 31-40, 41-50, >50), and ANOVA's computed.

^dDifferences were explored using t-tests.

Table 8

Correlations Between Perceptions of Immediate Supervision and Other Supervision
With Intermediate and Distant Criteria (N=526)

	General Evaluation	System Application ^b	Job Satisfaction	Satisfaction with Supervisor	Disciplinary ^a History	Grievances ^a
Disciplinary Style ^b	-.35**	.09*	.00	-.69**	-.02	.06
Consistency	.38**	-.09*	.01	.71**	.07*	-.05
Formal Punishers ^b	-.18**	.18**	.02	-.37**	.07	.10**
Informal Punishers ^b	-.29**	.11**	-.01	-.67**	.02	.05
Attributions: Consequences	-.18**	.06	.00	-.22**	.02	.05
Attributions: Attitudes	-.33	.05	-.03	-.40**	.00	.07*
Attributions: Minority	.17**	-.01	-.04	.39**	.03	-.06
Misuse of Discipline ^b	-.36**	.17**	-.06	-.38**	-.01	.09*
House and Dressler: Support	.36**	-.08*	.04	.80**	.01	-.05
House and Dressler: Structure	.16**	-.13**	-.06	.27**	-.03	-.10**
Multiple R	.47**	.23*	.14	.83**	.14	.18

*p < .05

**p < .01

^a This variable was changed to a log transformation.^b A high score in this dimension represents the negative end of the continuum.

Table 9

Correlation Between Intermediate and Distant Criteria (N=526)

	<u>Distant Criteria</u>	
	<u>Disciplinary History</u>	<u>Grievances</u>
General System: Evaluation	-.08*	-.14**
General System: Application	.04	.11**
Job Satisfaction	.02	-.07*
Satisfaction with Supervisor	.00	-.07*
Multiple R	.09	.19*

*p < .05

**p < .01

Table 10

Correlation Between Selected Items and Intermediate and Distant Criteria

Items	General Evaluation	System Application	Job Satisfaction	Satisfaction with Supervisor	Disciplinary History	Grievances
1. My boss disciplines people immediately after the rule infraction occurs.	.15**	-.02	.05	.31**	.08*	.08*
2. My boss disciplines people too harshly.	-.28**	.19**	-.02	-.46**	-.05	.08*
3. My boss is able to maintain friendly and close relationships with employees whom he has disciplined.	.34**	-.09*	.03	.60**	.03	-.06
4. My boss disciplines people without giving an explanation or a clear reason.	-.23**	.09*	.03	-.50**	.02	.04
5. ^a My boss is consistent from person to person in the way he disciplines people. My boss is consistent from situation to situation in the way he disciplines people. ^b My boss lets several infractions pass without taking action and then suddenly disciplines an employee for the same infraction that he let pass before.	.18**	-.12*	-.05	.32**	.09	-.06

^aThese items were summated and averaged to obtain a composite score reflecting a "consistency" theme.

^bThis item was reverse scored.

Table 11

Change in R^2 When Examining Reward-Oriented and Punishment-Oriented Supervisor Behaviors in Predicting Satisfaction with Supervision

	<u>SAT with Supervisor</u>			
	R	R^2	ΔR^2	F
Reward-Oriented ^a Variables	.80	.648		
+				
Punishment-Oriented ^b Variables	.83	.689	.041	8.476*
Punishment-Oriented	.78	.603		
+				
Reward-Oriented	.83	.689	.086	71.20**

* $p < .05$

** $p < .01$

^aHouse and Dressler Support and Structure Scale

^bDisciplinary style, consistency, formal, informal, attributions A,B,C, other Supervisor factors